REMARKS

The following numbered remarks are provided in response to similarly numbered sections of the office action.

1. No response is necessary.

2. The examiner has rejected claims 1-23 under 35 U.S.C. 112, second paragraph, and the claims are amended in response to this rejection. No new matter is added, and no claim is amended to avoid reading on any cited prior art.

3. No response is necessary.

4. Claims 1 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent 6,246,682 (Roy). The Examiner is respectfully requested to withdraw the rejection in view of the following comments distinguishing claims 1 and 15 over Roy.

Roy teaches an apparatus that receives and stores a multicast data transmission and then forwards copies of the data transmission to each of several destinations. A multicast data transmission is formed by a set of multicast cells, and Roy's system stores each arriving multicast cell in a separate block of RAM addresses(col. 5, lines 35-42). A separate instance of each multicast cell is thereafter read out and forwarded as a part of a separate data transmission to each destination. To keep track of the cells to be included in each outgoing sequence, Roy's system creates a separate linked list of pointers for each outgoing sequence when the incoming sequence is stored in the RAM. Each pointer of a linked list points to the storage block of a separate cell of the sequence and the pointers are linked in the order in which the cells to which they point to are to be forwarded (col. 5, lines 55-60). To forward a sequence corresponding to any one of the linked lists, the system

11

traverses the linked list, reading out each pointer in turn, and reading out and forwarding the cell referenced by each pointer.

Note that the linked lists for all copies of the stored sequence are identical because they all point to the same set of RAM storage locations.

The applicant's system is somewhat similar to Roy's system in that it writes cell of an incoming multicast sequence into separate storage locations of a cell buffer (such as a RAM) and later reads out a separate instance of each cell for each separate outgoing multicast sequence. The applicant's system also generates several pointers for each multicast cell stored in the cell buffer, one for each outgoing sequence. However, while Roy's pointers all point to the storage block containing the multicast cell, in the applicant's system, none of the generated pointers point to the cell buffer storage location that actually holds the multicast; they all point to _empty_ cell buffer storage locations. Thus when it is time to read an instance of a multicast cell out of the RAM so that it can be forwarded as a next cell of an outgoing sequence, it is necessary to translate the pointer associated with that particular cell (which points to an empty RAM block) into a pointer that points to the actual RAM location storing the cell. Roy does not teach or suggest this sort of pointer translation operation.

Claim 1

Claim 1 recites a cell buffer that stores an incoming multicast cell in a first storage location and then generates a "plurality of first pointers each referencing a separate one of said plurality of storage locations other than the first storage location to which the multicast cell was written." Roy does not teach this. Roy teaches that a plurality of pointers are generated for each multicast cell for inclusion in separate linked lists, but those pointers all point to the same storage

12

location (block) in the cell buffer (RAM)—the storage location containing the multicast cell.

Claim 1 further recites "creating a separate entry in its first database for each generated first pointer, the entry relating the first pointer to the first storage location to which the multicast cell was written". The applicant's system needs this database because the pointers the cell buffer generates do not actually point to the cell's storage location. Roy does not teach maintaining such a database because Roy's system doesn't need such a database.

Claim 1 further recites "wherein upon receiving each first pointer returned by the queue manager, the cell buffer consults the first pointer's entry in the first database to determine the first storage location the entry relates to the first pointer, and then reads an instance of the multicast cell out of that first storage location". Roy's does not teach performing such a database lookup operation because Roy's pointers point to the actual cell storage location. Claim 1 is therefore patentable over Roy.

Claim 15

Claim 15 is patentable over Roy for reasons similar to those expressed above in connection with claim 1.

5. The prior art made of record and not relied upon has been reviewed and does not appear to teach or suggest the applicant's invention as claimed.

6. No comment is necessary.

13

In view of the foregoing amendments and remarks it is believed the application is in condition for allowance. Notice of Allowance is therefore respectfully requested.

Respectfully submitted,

Daniel J. Bedell
Reg. No. 30,156

SMITH-HILL & BEDELL, P.C.
16100 N.W. Cornell Road, Suite 220
Beaverton, Oregon 97006

Tel. (503) 574-3100
Fax (503) 574-3197
Docket: ZETT 2149

Certificate of Mailing or Transmission

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office, on the ____27____ day of ___January___, 2006.

Penelope Stockwell

14